

CLAIMS

1. A nucleotide sequence constituted by the *Ha ds10 G1* gene, its promoter, *Ha ds10 G1* 5'- and 3' flanking sequences, wherein the nucleotide sequence is selected from the group consisting of identical nucleotide sequences identical to SEQ ID NO:1, first homologous nucleotide sequences being homologous by at least 70% to SEQ ID NO:1, second homologous nucleotide sequences being homologous being at least 70% homologous to complementary sequences to SEQ ID NO:1, and fragments thereof.

10 2. A nucleotide sequence according to claim 1, wherein the first homologous sequence is homologous by at least 80% to SEQ ID NO:1.

15 3. A nucleotide sequence according to claim 1, wherein the first homologous sequence is homologous by less than 95% to SEQ ID NO:1.

20 4. A nucleotide sequence, wherein the second homologous sequence is homologous by at least 80% to SEQ ID NO:1.

25 5. A nucleotide sequence according to claim 1, wherein the second homologous sequence is homologous by less than 95% to SEQ ID NO:1.

30 6. A nucleotide sequence according to any of the claims 1 to 6, and further including a chimeric gene.

7. A nucleotide sequence according to claim 6, suitable for expression of a chimeric gene.

8. A nucleotide sequence according to claim 7, wherein the chimeric gene is specific of seeds from early maturation stages.

35 9. A nucleotide sequence according to claim 8, constituted by constructions ds10F1, ds10F2, ds102Δ, ds10F3 and ds10EC1 or part thereof.

10. A nucleotide sequence according to claim 10, including *Ha ds10 G1* gene coding and 3'-flanking sequences.

11. A nucleotide sequence according to claim 10, including ds10F2 and ds10F2 $\Delta$  in constructions.

5 12. A nucleotide sequence according to claim 8, including *Ha* ds10 G1 gene coding and intron sequences.

13. A nucleotide sequence according to claim 12, contained in constructions ds10F3.

10 14. An expression cassette including a nucleotide sequence according to ~~any of claims 1 to 13~~ and a chimeric gene.

15 15. A vector including an expression cassette according to claim 14.

16. Host cells including a nucleotide sequence according to ~~any of claims 14 to 15~~.

20 17. Use of nucleotide sequences as defined in ~~any of claims 1 to 15~~ in the specific expression of chimeric genes in seeds, seed parts, seed extract, seed embryos and seedling tissues.

25 18. Use of nucleotide sequences as defined in ~~any of claims 9 to 11~~ for increasing the expression of chimeric genes specifically in transgenic plant seeds.

30 19. Use of nucleotide sequences as defined in ~~any of claims 11 to 13~~ for increasing the expression of chimeric genes in seeds and/or reduce it in other tissues.

35 20. A transgenic plant transformed by a nucleotide sequence according to ~~any of claims 1 to 15~~.

21. A transgenic plant according to claim 20, selected from sunflower, tobacco, soya, oilseed rape, "canola", maize, wheat, barley, rice, bean, cassava

and peanut.

*a* 22. Use of a transgenic plant according to ~~any of claims 20 to 24~~ for the production of substances resulting from the expression of chimeric genes.

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23. Use of a transgenic plant according to claim 22 wherein the substances are proteins, bioactive substances and oils.

*a* 24. Substances obtained according to ~~any of claims 23 and 24~~.

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